Saskowski, Ronald

From: Miller, Scott

Sent: Wednesday, June 17, 2015 2:28 PM

To: Saskowski, Ronald

Subject: FW: Smokey Mtn Smelters

Hello Ron, Please save this to SEMS for Smokey Mountain Smelters. Thank you, Scott

From: Lee Barron [mailto:Lee.Barron@tn.gov]

Sent: Tuesday, June 16, 2015 3:13 PM

To: Simmons, Kevin

Cc: Erin F. Sutton; Miller, Scott **Subject:** Smokey Mtn Smelters

Mr. Simmons:

The TDEC-Division of Remediation is interested in the additional analysis of the ground water at this site in order to determine the natural buffering capacity of the aquifer. One of the proposed remedies for the metals contamination in the ground water is to inject Sodium Bicarbonate. However, TDEC feels that the requirement for this remedial action might not be necessary, if the ground water is sufficiently buffered by the limestone bedrock of the aquifer. Therefore we have requested the CaCO3, hardness & alkalinity analysis to provide data on the natural conditions of the aquifer. Also, Ammonia is present in Aluminum Dross which is in the wastes that were disposed of at this site; and Ammonia breaks down into Nitrate/Nitrite. Furthermore, past industrial practices at this site included the manufacture of fertilizers. We believe that this included Ammonium Nitrate and Phosphorous/Orthophosphate fertilizers. Therefore, we also feel that analysis for these constituents is appropriate. Additionally, the Aluminum Salt Cake waste that was generated at this site by the reprocessing of the Aluminum Dross contains elevated Chlorides. Prior to the interim action by the ERRB, one could delineate the extent of downstream impact to surface water by measuring the conductivity of the stream.

If you require additional information regarding this matter, please do not hesitate to contact me.

Lee Barron, PG, CHMM Division of Remediation Knoxville Field Office 3711 Middlebrook Pike Knoxville, TN 37921 Office: 865-594-5482

Email: Lee.Barron@TN.gov

